
मछली पकड़ने के गियर की मार्गदर्शिका

भाग 15 : 350 मी पर्स सीन

(पहला पुनरीक्षण)

Guide for Fishing Gear

Part 15 : 350 m Purse Seine

(First Revision)

ICS 65.150

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FOREWORD

This Indian Standard (First Revision) was adopted by the Bureau of Indian Standards, after the draft finalized by Textile Materials for Marine/Fishing Purposes Sectional Committee had been approved by the Textile Division Council.

This standard was originally published in 1975 and has now been revised to incorporate the latest developments in this field.

This standard consists of number of parts. Part 1 deals with the general requirements while the subsequent parts cover different types of fishing gears.

The composition of the Committee responsible for the formulation of this standard is given in Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with the final value, observed or calculated, expressing the result of a test or analysis shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

GUIDE FOR FISHING GEAR

PART 15 : 350 m PURSE SEINE

(First Revision)

1 SCOPE

This standard (Part 15) specifies guidelines for construction of 350 m purse seine.

2 REFERENCES

The following standards contain provisions which, through reference in this text, constitute provisions of this standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this standard are encouraged to investigate the possibility of applying the most recent editions of these standards indicated below.

*IS No.**Title*

4401 : 2006	Textiles — Twisted nylon fishnet twines (<i>fourth revision</i>)
5508 (Part 1) : 2020	Guide for fishing gear — General (<i>first revision</i>)
6347 : 2003	Textile — Polyethylene monofilament twines for fishing — Specification (<i>first revision</i>)
7533 : 2003	Textiles — Polyamide (nylon) monofilament yarn for fishing — Specification (<i>second revision</i>)

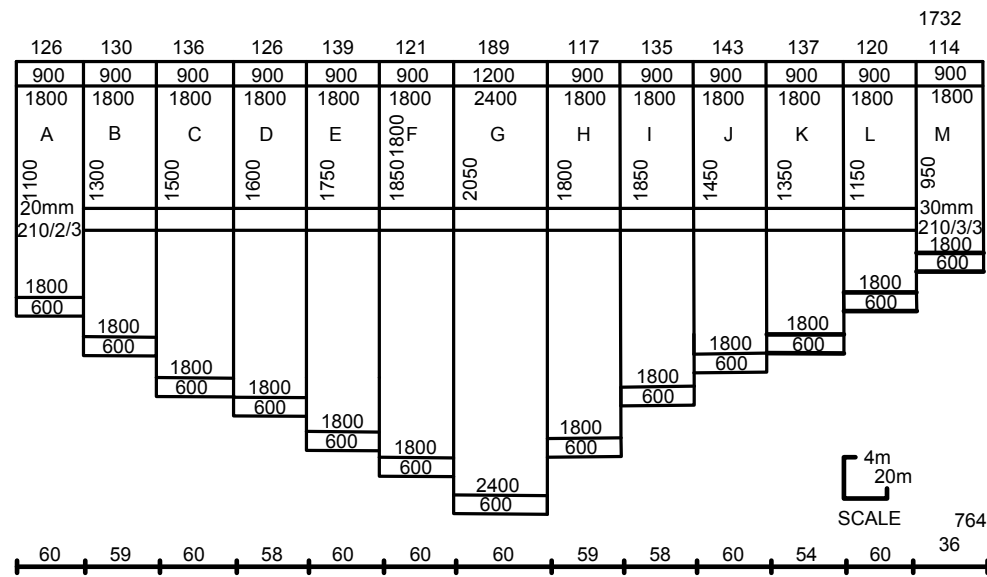
3 CONSTRUCTION

The particulars of webbing, ropes and other accessories used for construction of 350 m purse seines are given in the data sheet when read with Fig.1.

IS 5508 (Part 15) : 2021

DATA SHEET FOR 350 m PURSE SEINE													
NAME OF GEAR : Mackerel and Sardine Seine			MAIN SPEICES CAUGHT : Mackerel and Sardine						LENGTH OF VESSEL : 13.5 m - 14.5 m				
TYPE : Purse Seine			FISHING CONDITIONS : Operated up to 40 m Pelagic Shoals of Sardine and Mackerel Located by Visual Observations						kW : 65				
Country : India													
PARTICULARS OF WEBBING													
WEBBING	A	B	C	D	E	F	G	H	I	J	K	L	M
Material	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon	Nylon
Knot	Single trawl/Reef/Knotless												
Size of netting yarn, denier	210/2/3	210/2/3	210/2/3	210/2/3	210/2/3	210/2/3	210/2/3	210/2/3	210/2/3	210/2/3	210/2/3	210/2/3	210/3/3
Breaking load, kgf	6	6	6	6	6	6	6	6	6	6	6	6	9
Length of mesh, mm	20	20	20	20	20	20	20	20	20	20	20	20	30
Upper edge, meshes	1800	1800	1800	1800	1800	1800	2400	1800	1800	1800	1800	1800	1800
Lower edge, meshes	1800	1800	1800	1800	1800	1800	2400	1800	1800	1800	1800	1800	1800
Depth, meshes	1100	1300	1500	1600	1750	1850	2050	1800	1650	1450	1350	1150	950
Head rope	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>35</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>25</u>	<u>40</u>
Foot rope	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>37</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>26</u>	<u>42</u>
Take up	Selvege only												
Selvege	Top: 2.5 meshes deep; Length of mesh – 40 mm Bottom: 5 meshes deep; Length of mesh-40 mm Twine: 210/6/3 denier nylon												
Hanging coefficient	Head rope: 0.73; Foot rope: 0.76; Average more at the bunt, decreasing towards centre.												
PARTICULARS OF LINES AND ROPES													
LINE/ROPE	HEAD ROPE	FOOT ROPE	PURSE LINE	BICAST LINE	HAUL – IN BRIDLE		RING BRIDLE	LIFTING LINE					
					Skiff End Bridle and Line	Wing End Bridle and Line							
Material	HDPE twisted mono- filament	HDPE twisted mono- filament	HDPE twisted mono-filament/ Wire rope	HDPE twisted mono- filament	HDPE twisted mono-filament	HDPE twisted mono- filament	HDPE twisted mono-filament	HDPE twisted mono-filament					
Preservation	–	–	–	–	–	–	–	–					
Size (diameter), mm	12	12	18/12	12	12	12	12	8					
Breaking load, kgf	1540	1540	3000/7000	1540	1540	1540	1540	700					
Length, m	350	365	–	–	10 and 20	10 and 50	–	–					
PARTICULARS OF ACCESSORIES						OTHER INFORMATION							
ACCESSORIES	FLOATS	SINKERS	PURSE RINGS	BUOYS	NOTES 1 IS 5508 (Part 1) : 2020 Guide for fishing gear: Part 1 General forms a preface to this part. 2 Reference may be made to IS 4401, IS 6347 and IS 7533 for relevant materials.								
Number	1732	765	35	3									
Material	Compressed plastic	Lead	Mild steel rod	Plastic									
Shape	Spindle/ Cylindrical	–	–	Egg-shaped									
Diameter, mm	60/95	12	250	–									
Mass in air, g	–	225	500	–									
Mass in water, g	–	205	435	–									
Length, mm	60/75	–	–	–									

STRETCHED LENGTH : 498 m HEAD ROPE : 350 m FOOT ROPE : 365 m
 HANGING COEFFICIENT : HEAD ROPE : 0.73 FOOT ROPE : 0.76



SELVEDGE :
 TOP : 2.5 MESHES DEEP, 40 mm, 210 / 6 / 3
 BOTTOM : 5 MESHES DEEP, 40 mm, 210 / 6 / 3

FIG. 1 350 M PURSE SEINE

ANNEX A

(Informative)

A-1 GLOSSARY OF TERMS RELATING TO PURSE SEINES

A-1.1 Purse Seine — A long wall of webbing without prominent bunt or bag that is with very little fullness and with the webbing hanging nearly straight down between the float and head lines. The essential feature of the net is the pursing by pulling a purse line, which is threaded through rings, along the bottom of the net.

A purse seine has generally three broad divisions, namely, main body, wing and bunt, each of which cannot be demarcated separately.

A-1.1 Main Body — The portion which forms the bulk of the net and lies in between the wing and the bunt.

A-1.2 Bunt — The end which is shot first and hauled up when the catch is accumulated for brailing and is made of stronger webbing. It is a small portion of the net, say one or two panels, and is shorter in depth than the other panels.

A-1.3 Wing — The end of the net which is shot last and hauled up first.

A-1.4 Selvedge — A definite number of rows of meshes at the upper and lower borders and at extremities of the webbing fabricated with twines thicker than those of the main webbing.

A-1.5 Head Rope — The rope or line to which the upper edge of the net is finally attached.

A-1.6 Foot Rope — The rope or line to which the lower edge of the net is attached.

A-1.7 Float Line — The line attached to head rope through which the floats are threaded in.

A-1.8 Lead Line — The line attached to the foot rope through which the sinkers are threaded in.

A-1.9 Purse Line — The line passing through the purse rings, the hauling of which effects the closing of the net.

A-1.10 Breast Line — This is the float line carried beyond the upper corner of the net to form a loop spliced heavily or lashed at its base, then extended down the end of webbing to the lower corner of the net. Frequently it is extended back along the lead line.

A-1.12 Bridles

A-1.12.1 Haul-in Bridles (*Skiff End Bridle and Line, and Wing End Bridle and Line*) — Pairs of ropes attached to the head rope and foot rope of the bunt and wing ends forming a triangle and connected to the skiff and boat respectively by single lines.

A-1.12.2 Ring Bridle — The rope connecting each purse ring with the foot rope either one or if two forming a triangle, in the latter case the apex angle is less than 60°. This enables easy and effective pursing.

A-1.13 Purse Rings — Rings attached to the foot rope at equal intervals according to the length of the net.

A-1.14 Lifting Line — The line used for lifting a group of floats of limited number while in operation if required and during hauling.

A-1.15 Brail — A long-handled dip net.

A-1.16 Brailing — Dipping or landing of fish out of the net into the fishing boat. The term is also used for landing of fish from the boat to the cannery or the jetty.

A-1.17 Skiff — A small boat usually 6 to 8 m long, operated along with a purse seiner to help in pursing the corks and to hold up the outer side of the landing bag for brailing the catch.

ANNEX B*(Foreword)***COMMITTEE COMPOSITION**

Textile Materials for Marine/Fishing Purposes Sectional Committee, TXD 18

<i>Organization</i>	<i>Representative(s)</i>
ICAR-Central Institute of Fisheries Technology, Kochi	SHRIMATI (DR) SALY N. THOMAS (<i>Chairman</i>)
Association of Indian Fishery Industries, New Delhi	SHRI T. RAGUNATH REDDY DR C. BABU RAO (<i>Alternate</i>)
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Central Institute of Fisheries, Nautical and Engg Training, Kochi	SHRI M. G. MAKWANA
ICAR-Central Institute of Brackishwater Aquaculture, Chennai	SHRI JOSE ANTONY
ICAR-Central Institute of Fisheries Technology, Kochi	SHRIMATI (DR) SALY N. THOMAS DR SANDHYA K. M. (<i>Alternate</i>)
ICAR-Central Marine Fisheries Research Institute, Kochi	DR RATHEESH
Fisheries Development Commissioner, New Delhi	DR PAUL PANDIYAN DR SANJAY PANDEY (<i>Alternate</i>)
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National Institute of Ocean Technology, Chennai	DR G. DHARANI DR N. V. VINITHKUMAR (<i>Alternate</i>)
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The Synthetic and Art Silk Mills' Research Association, Mumbai	SHRIMATI ASHWINI A. SUDAM SHRI RAVI PRAKASH SINGH (<i>Alternate</i>)
The Karnataka Fisheries Development Corporation Ltd, Bangaluru	MANAGING DIRECTOR
The Kerala State Cooperative Federation for Fisheries Development Ltd, Kochi	SHRI P. SURENDREN
The Marine Products Export Development Authority, Kochi	DR M. K. RAMMOHAN SHRI A. SAKTHIVEL (<i>Alternate</i>)
BIS Directorate General	SHRI A. K. BERA, SCIENTIST 'F' AND HEAD (TXD) [REPRESENTING DIRECTOR GENERAL (<i>Ex-officio</i>)]

*Member Secretary*SHRI A. K. BERA
SCIENTIST 'F' AND HEAD (TEXTILES), BIS

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